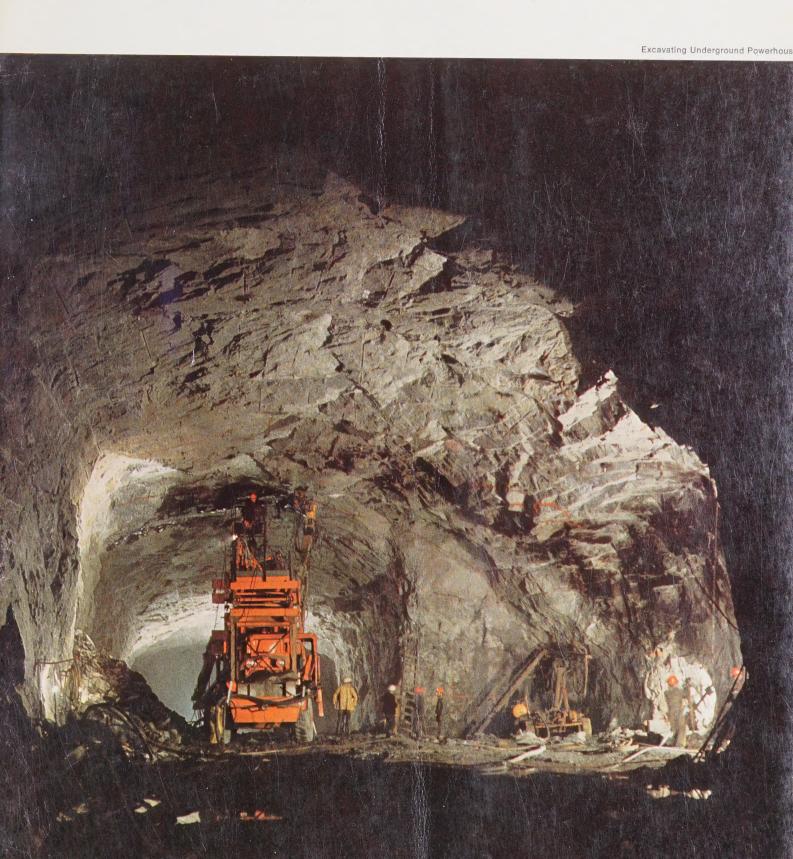


Annual Report 1968





Officers

Chairman: DONALD GORDON, C.C., C.M.G.

Deputy Chairman: EDMUND L. de ROTHSCHILD, T.D.

President and Chief Executive Officer: DONALD J. McPARLAND, P.Eng.

Vice-President (Finance): E. G. LAMBERT, C.A., A.T.I.I.

Vice-President (Legal) & Secretary: C. T. MANNING, Q.C.

Treasurer: M. C. BURNES, C.A.

Directors

ROBERT DOUGLAS ARMSTRONG, Toronto, Ontario President, Rio Algom Mines Limited

*HENRY BORDEN, C.M.G., Q.C., Toronto, Ontario Former President and Chairman, Brazilian Light & Power Company, Limited

PAUL GUY DESMARAIS, Montreal, Quebec Chairman of the Board, Power Corporation of Canada Limited

*SIR VAL DUNCAN, O.B.E., London, England Chairman and Chief Executive, The Rio Tinto-Zinc Corporation Limited

*DONALD GORDON, C.C., C.M.G., Westmount, Quebec Chairman, Churchill Falls (Labrador) Corporation Limited and President and Chief Executive Officer, British Newfoundland Corporation Limited

*SAM HARRIS, New York, U.S.A. Senior Partner of Strasser, Spiegelberg, Fried & Frank

GEORGE PUGH HOBBS, St. John's, Newfoundland Chairman, Newfoundland and Labrador Power Commission JEAN-CLAUDE LESSARD Montreal, Quebec President, Quebec Hydro-Electric Commission

*DONALD J. McPARLAND, P.Eng., Westmount, Quebec President and Chief Executive Officer, Churchill Falls (Labrador) Corporation Limited; Vice-President, British Newfoundland Corporation Limited; President, Twin Falls Power Corporation Limited

ANDRE MONAST, Q.C., Quebec City, Quebec Partner, St. Laurent, Monast, Desmeules & Walters, Advocates

*EDMUND L. de ROTHSCHILD, T.D., London, England Senior Partner of N. M. Rothschild & Sons

PHILIP SHELBOURNE, London, England Partner of N. M. Rothschild & Sons

*ARTHUR S. TORREY, Montreal, Quebec Honorary Chairman, Pitfield, Mackay, Ross & Company Limited

SIR MARK TURNER, London, England Deputy Chairman, Kleinwort Benson Limited and The Rio Tinto-Zinc Corporation Limited

*Member of the Executive Committee

Les personnes intéressées peuvent se procurer la version française de ce rapport annuel en s'adressant au service des Relations publiques, Churchill Falls (Labrador) Corporation Limited, Un Westmount Square, Montréal 216, Québec

Head Office

1 Viking Road St. John's, Newfoundland

Executive Office

One Westmount Square Montreal 216, Quebec

Associated Company

Twin Falls Power Corporation Limited 1 Viking Road St. John's, Newfoundland

Auditors

Peat, Marwick, Mitchell & Co. Montreal, Quebec

Bankers

Bank of Montreal N. M. Rothschild & Sons Morgan Guaranty Trust Company of New York

Foreword from the President



During 1968, many of the objectives towards which the Company has worked unremittingly for some three years were achieved.

Agreement was reached and negotiations were concluded with Hydro-Quebec on the Power Contract.

The authorization in July by the Government of Quebec for Hydro-Quebec to execute the Power Contract permitted the Company to proceed with an offering of First Mortgage Bonds. In October, it was announced that the Company had arranged commitments for the subscription of U.S.\$500 million of First Mortgage Bonds, and that a Series 'B' issue in Canada amounting to \$50 million had been committed. This financing is believed to be the largest single bond issue, either public offering or private placement, arranged by an investorowned company.

It is a source of gratification that your Company should have arranged such a financing, on favorable terms and conditions, in a difficult money market. This testifies to the economic soundness of the Project, the adequacy of the sales contract, and to the stability and future growth of electrical demand in the Province of Quebec, which is the Company's prime outlet for power.

In July, an equity issue of 1,666,666

shares was made to the existing shareholders of the Company. The proceeds amounting to \$25 million were used to furnish funds for construction activities pending the drawdown of long-term financing.

In December, arrangements for the placement of \$100 million of the Company's General Mortgage Bonds were successfully concluded. Prior to the year end, some \$25 million of these bonds were sold and the proceeds utilized to repay bank loans and for current purposes.

In December, it was also announced that a Consortium of Canadian banks, entering into what is reported to be a record bank financing venture for Canada, had agreed to provide standby credit for bridging and term financing in various combinations up until 1978, thereby providing \$150 million to assist in the construction of your power project.

Work has proceeded in the first quarter of 1969 on the documentation and legal formalities which must be completed before drawdown of funds against the sale of the Company's First Mortgage Bonds can be effected.

The financing plan for the Project may now be summarized as follows:

Equity paid in	\$	83	million
First Mortgage Bonds Series A and B		590	
General Mortgage Bonds		100	
Retained Earnings		150	
	\$	923	million
Bank financing available		150	
(Rounded figures)	\$1	.073	million

The total estimate for the completion of the Project is approximately \$950 million, excluding working capital requirements. From the above table it can be seen that adequate provision has been made for foreseeable financing requirements.

Construction has progressed satisfactorily in the field. The Project continues on schedule, and expenditures and commitments are within estimates. Further details are provided in the Directors' Report to Shareholders which follows.

It is worthy of note that efforts to arrange contracts of a reasonable size,

so as to ensure maximum participation in the Project of small and medium-sized construction firms, have had rewarding results. This is evident in the degree of participation by the Canadian construction industry, and in terms of the competitive bidding response and the performance of contractors engaged in work on the site.

The Company has received the consistent support of the Canadian manufacturing industry. Evaluation studies have shown that Canadian industry is highly efficient in the design and manufacture of heavy power and generating equipment and related items. The volume of the orders placed and pending by CFLCo is most significant to this industry, which has had competitive difficulties from low-cost imports in domestic markets and has encountered non-tariff barriers abroad.

The Company believes that the support of this vital industry at such a critical time is clearly in the national interest. It is only by the development of Canada's natural resources, supported by a viable and expanding manufacturing base, that the country will continue to grow and to prosper.

Performance of Twin Falls Power Corporation, which is managed by your Company, was satisfactory during 1968. The expansion to 300,000 horsepower was completed three weeks ahead of schedule at a final cost of \$10.6 million against preconstruction estimates of \$10.7 million, with the contingency allowance intact. Revenue during 1968 was up 9.8 per cent and net earnings increased 17.7 per cent.

The progress in the affairs of your Company during 1968 reflects the calibre and the work output of the Company's management and staff, whose efforts during the year are gratefully acknowledged.

D. J. McPARLAND,
PRESIDENT AND CHIEF EXECUTIVE OFFICER.

Montreal, April 11, 1969



Following the major preparatory activities of 1967, which included the construction of camps, roads and other infrastructures for the Project, and the finalization of the planning and engineering of the Project, the year 1968 saw major construction of the actual Power Project facilities well underway. During the year expenditures against construction totalled \$66.1 million, bringing the total costs incurred against the Project at the end of 1968 to \$115 million. In 1968, expenditure was within two per cent of the basic plan developed in 1966. Against the direct construction estimate of \$522 million some 46 per cent was committed by the end of the year.

During 1968, 26 contracts were awarded having an aggregate value of \$133.5 million. At the year end there were some 55 contracts underway or completed on the Project, involving 31 different contractors.

At the year-end, a re-estimate to completion for the Project was undertaken, based on actual performance to date and current cost trends. This re-estimate confirmed the basic Project estimate of three years ago.

A review was also made of remaining or unallocated funds in the escalation accounts. This indicated that, based on forward projections and on interpretations of experience to date, the escalation allocations should be adequate for the purpose intended, provided that the present pattern of wage and material cost increases remains relatively uniform over the next few years.

At the moment, there is no reason to question the accuracy of the Project cost projections, which have been fully supported both by actual experience to date and current re-forecasts to completion.

Bidding patterns continued to be well grouped and competitive throughout the year.

The labor force on site grew to approximately 3,000, housed in some 12 camps throughout the Project area. Labor supply during the year was adequate in both number and quality.

The standard of food and accommodation at Churchill Falls has earned the Project an enviable reputation across the country, and is a major factor towards attracting high-quality labor.

Principal Construction Activity

1. Underground Powerhouse

The major access openings to the underground powerhouse were completed during 1968. These were the 5,200-foot access tunnel and the 1,000-foot vertical access shaft. In addition, the drive across the top arch of the powerhouse was completed linking the two access openings, and enabling work to commence on the excavation of the three major underground chambers — the powerhouse, the surge chamber and the transformer gallery, together with 11 penstocks and various connecting shafts and tunnels. In

July, the main powerhouse excavation contract, with a value of \$46 million, was awarded to a consortium of six major construction companies. This is the Project's largest single construction contract and involves the removal of well over one million cubic yards of rock, together with associated works such as concreting, the raising of two 400-ton cranes and some 500,000 feet of rock-bolting. By the year-end, excavation was proceeding on schedule at a number of faces. Meanwhile, tunnelling of the mile-long twin tailraces continued.

The underground work to prepare what will be the largest subterranean powerhouse in the world, involving excavation rates which will rise to some 15,000 tons of rock per day, is a critical sector of the construction program. This phase calls for complex management and control techniques and requires many varied skills to carry it out within the time schedules and in accordance with the specifications.

2. Water Control Structures and Reservoirs

During the year, contracts to the value of some \$8.5 million were awarded for the construction of the Lobstick structure, the principal

(Continued on page 6)

Clearing the 710-ft. wide right-of-way for the three 735,000 volt transmission lines.

(Continued from page 5)

water control structure of the Project, situated some 50 miles from the power site. This major installation was 70 per cent complete by the end of the year and concreting continued throughout the winter. It is planned to divert the river through this structure in April, 1969.

In May, 1968, a major contract was awarded for the excavation of the main intake and dykes in the forebay, one thousand feet above the underground powerhouse. Some 750,000 cubic yards of rock were excavated in this area which enabled the commencement of work on the intakes by the latter part of the year. A contract valued at over \$10 million for this work, together with the lining of the 11 penstocks was awarded. These two contracts totalled some \$19 million.

Road building and improvements continued, with particular emphasis on roads required to reach the outlying areas of the 2,567 square mile reservoir. The 65-mile Orma Lake road was about two-thirds completed during the year, and, in the fall, a contract was awarded for the construction of a further 28 miles of road extending to the Sail Lake area.

The completion of this road network will permit mobilization for building the network of dykes required to shape and contain the reservoir. This major dyke program, which will form

one of the principal features of the 1969 construction program, involves the building of some 90 earth and rockfill dykes extending nearly 40 miles and requiring about 26 million cubic yards of fill.

In October, the first major contract of the dyke program was awarded, covering 15 miles of dykes in the Sandgirt-Lobstick area. Mobilization and preparation work for this \$23 million contract was well underway by the year's end.

3. Townsite

A number of important contracts were let during 1968 for the construction of the permanent townsite near the main construction camp. These involved the layout and landscaping of the new town, together with the construction of 59 houses and associated services. Four 12-unit apartment buildings are also under construction. Construction of the permanent Town Centre, including stores, school, hotel and recreational facilities under one roof was commenced during the year, and the hospital was essentially completed.

Contracts awarded during the year in this area amounted to some \$7 million.

4. Other Facilities

In addition to the activities outlined above, a start was made in the fall on the clearing of the 735 Kv transmission line. Despite difficult winter conditions, this work continued substantially ahead of schedule and by the year-end some 15 miles of 710-foot wide right-of-way had been cleared.

Work also started on the new Churchill Falls Airport and terminal buildings, and their completion in 1969 will lead to a considerable improvement in the commercial air services operating from St. John's and Montreal.

During 1968, there was continuous expansion of various camps and camp facilities to accommodate the ever-increasing work-force on site. Camps at out-lying sites to cater for dyke work and transmission line clearing were under preparation, while at the Main Camp, additional amenities and services such as warehouses and laboratory, a club house, an ice-rink, helicopter pad, and a sewage treatment plant were installed together with the installation of family trailers and other buildings.

The great increase in the quantity of freight coming to the site was catered for by the considerable expansion of the handling and warehousing facilities at Esker, the railhead for the Project, some 113 miles to the west.

5. Engineering

A large part of the 1968 engineering activity was devoted to the preparation of the detailed design and contract documents for the major civil engineering contracts for the hydraulic structures, dykes and powerhouse.

(Continued on page 15)



Balance Sheet as at December 31, 1968

,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1968	1967
Assets		
Current assets:		
Cash and short-term deposits Accounts receivable (including \$264,370 due from affiliates) Prepaid expenses	\$ 3,634,531 3,668,673 318,539	728,343 510,764
Total current assets	7,621,743	1,239,107
Special refundable tax	23,083	18,901
Investment in shares of Twin Falls Power Corporation Limited,		
at cost (note 1)	2,500,000	2,500,000
Churchill Falls power project, at cost	113,799,329 4,287,338	42,013,790 3,423,125
	109,511,991	38,590,665
Financing expenses	1,605,783	217,289
	\$ 121,262,600	42,565,962
Liabilities		
Current liabilities: Accounts payable Accrued liabilities	\$ 10,820,437 1,668,233	4,781,654 359,548
Total current liabilities	12,488,670	5,141,202
	12,100,070	0,111,202
Advances from shareholders: Parent company Minority shareholders		2,006,902 10,730,138
		12,737,040
Long-term debt (note 3)	25,000,000	-
Shareholders' equity:		
Capital stock (notes 3 and 4)	82,899,986 873,944	24,149,980 537,740
	83,773,930	24,687,720
Commitments and contingent liabilities (note 6)		
	\$ 121,262,600	42,565,962

The accompanying notes are an integral part of the above balance sheet and should be read in conjunction therewith.

Approved on behalf of the Board:

DONALD GORDON, Director.

J.-C. LESSARD, Director.



Statement of Earnings and Retained Earnings for the Year Ended December 31, 1968

	1968	1967
Revenue from Twin Falls Power Corporation Limited:		
Rental of rights and facilities	\$ 662,000	641,000
Dividends	400,000	350,000
Construction management fee	202,213	166,974
Gross revenue	1,264,213	1,157,974
Newfoundland rental	63,796	48,398
Depreciation	864,213	807,974
Net earnings for the year (notes 5 and 8)	336,204	301,602
Retained earnings at beginning of year	537,740	236,138
Retained earnings at end of year	\$ 873,944	537,740

The accompanying notes are an integral part of the above statement of earnings and retained earnings and should be read in conjunction therewith.

Statement of Source and Application of Funds for the Year Ended December 31, 1968

Source of funds:	1968	1967
From current operations:		
Net earnings Depreciation	\$ 336,204 864,213	301,602 807,974
Issue of capital stock Advances from shareholders General Mortgage Bonds	1,200,417 58,750,006 ——————————————————————————————————	1,109,576 7,611,810 12,737,020 — 21,458,406
Application of funds:		
Development of Churchill Falls power project Financing expenses Special refundable tax — net (adjustment) Conversion to shares of advances from shareholders	71,785,539 1,388,494 4,182 12,737,040	24,530,291 217,289 (2,921) 1,999,980
	85,915,255	26,744,639
Decrease in working capital	\$ 964,832	5,286,233

The accompanying notes are an integral part of the above statement of source and application of funds and should be read in conjunction therewith.



Notes to the Financial Statements as at December 31, 1968

(1) Twin Falls Power Corporation Limited:

Churchill Falls (Labrador) Corporation Limited ("Churchill Falls") holds voting control of Twin Falls Power Corporation Limited ("Twin Falls") through its ownership of all the Class A shares which carry four votes per share but these shares represent only one third of the shareholders' interest in Twin Falls and, therefore, its assets and liabilities have not been included in Churchill Falls' financial statements. Churchill Falls' share of the net earnings of Twin Falls for 1968 amounted to \$439,030 of which \$400,000 has been included in earnings as dividends. Churchill Falls' share of the retained earnings of Twin Falls at December 31, 1968 was \$247,671 which is not reflected in the accounts.

(2) Power Contract:

Quebec Hydro-Electric Commission ("Hydro-Quebec") and Churchill Falls have agreed upon the terms of a power contract ("Power Contract") which Hydro-Quebec have been authorized to execute by an Order-in-Council of the Quebec Government dated July 10, 1968. The Power Contract provides for the purchase of substantially all the power from the Churchill Falls power project ("Project") for an initial period of approximately forty years and will be renewed for a further period of twenty-five years. It is expected that the Power Contract will be executed concurrently with the consummation of the debt financing arrangements described below.

(3) Long-Term Debt:

The current status of the planned debt financing for the Project is set out below.

(i) First Mortgage Bonds:

Commitments, subject to the completion of final documentation satisfactory to prospective purchasers and to the execution of the Power Contract, have been received for the purchase of First Mortgage Bonds as follows:

Series A due December 15, 2007, bearing interest at the rate of $7^3/4^0/_0$ per annum, payable in U.S. dollars in an aggregate principal amount of \$500,000,000 U.S. to be sold at $100^0/_0$ of their principal amount.

Series B due December 15, 2007, bearing interest at the rate of $7^7/8$ % per annum, payable in Canadian dollars in an aggregate principal amount of \$50,000,000 Canadian to be sold at 98.50 % of their principal amount.

The aforesaid First Mortgage Bonds will be entitled to the benefit of sinking funds sufficient to retire them fully by maturity.

(ii) General Mortgage Bonds:

By Deed of Trust and Mortgage dated September 1, 1968, General Mortgage Bonds bearing interest at the rate of $7^{1/2}$ $^{0/0}$ per annum, maturing on a date three years after the latest maturity of any of the First Mortgage Bonds, have been authorized in a principal amount of \$100,000,000. The Bonds are being sold in units of \$1,000 principal amount of Bonds and 10 Common Shares and the entire issue has been placed at a price of \$1,000 per unit. The units sold and to be sold are as follows:

	Gen	eral Mortgage Bonds	Common Shares	
December, 1968	\$	25,000,000	250,000	shares
January, 1969		10,000,000	100,000	//
February, 1969		10,000,000	100,000	"
March, 1969		10,000,000	100,000	"
April, 1969		15,000,000	150,000	"
May, 1969		15,000,000	150,000	"
June, 1969		15,000,000	150,000	//
	\$	100,000,000	1,000,000	"

The General Mortgage Bonds are entitled to the benefit of a sinking fund, commencing after completion of the Project, amounting to $2^{0}/_{0}$ of the balance outstanding at the commencement of each year, payable in semi-annual



Notes (continued)

instalments. Upon issuance of the aforesaid First Mortgage Bonds the General Mortgage Bonds will become subordinate thereto.

(iii) Bank Loans:

Churchill Falls has been advised by letter dated December 16, 1968 that a consortium of Canadian banks is prepared to execute an agreement which will provide for a credit not exceeding \$150,000,000 at any one time outstanding, subject to the execution of the Power Contract, to the execution of the First Mortgage Trust Deed and to the execution of agreements for the purchase of at least \$518,000,000 of First Mortgage Bonds. The proposed agreement will be subject to certain other conditions and no amounts may be drawn down thereunder prior to January 1, 1972.

(4) Capital Stock:

(i) Shareholders' advances of \$12,737,040 outstanding as at December 31, 1967 increased to \$33,750,000 by June 1968 at which time this amount was applied in satisfaction of the final call on the 2,500,000 Common Shares issued in 1967.

(ii) During the year 1,916,667 fully paid Common Shares (including the 250,000 issued with the General Mortgage Bonds referred to in Note 3) were issued for \$25,000,006 cash.

(iii) As at December 31, 1968

Common Shares without nominal or par value:

	Shares	Amount
Authorized	10,000,000	
Issued and fully paid	8,009,999	\$ 82,899,986

(5) Dividend Restrictions:

The covenants of the debt instruments of Churchill Falls prohibit the payment of cash dividends by Churchill Falls prior to completion of the Project and place restrictions on the payment of cash dividends thereafter.

(6) Commitments and Contingent Liabilities:

(i) At December 31, 1968 Churchill Falls had entered into contracts related to the Project involving expenditures after that date estimated at \$170,000,000.

(ii) Under the terms of the Churchill Falls (Labrador) Corporation Limited (Lease) Act, 1961 and amendments thereto Churchill Falls has entered into a 99-year lease covering the water power potential of the Upper Churchill Watershed and is required to pay an annual rental of 8% of the consolidated net profits before income taxes (as defined) and an annual royalty of 50 cents per horsepower year generated (as defined).

(iii) Churchill Falls' liability under its pension plan for past services is being paid by annual instalments over 22 years. The payment for past service in 1968 was \$4,100. The total unfunded liability for past service is \$59,900 as at December 31,

1968.

(7) Directors' Remuneration:

Remuneration paid to Directors in 1968 amounted to \$23,000.

(8) Income Taxes:

No provision has been made for taxes on income because Churchill Falls did not have any income subject to tax.

Auditors' Report to the Shareholders

We have examined the balance sheet of Churchill Falls (Labrador) Corporation Limited as at December 31, 1968 and the statements of earnings and retained earnings and source and application of funds for the year then ended. Our examination included a general review of the accounting procedures and such tests of accounting records and other supporting evidence as we considered necessary in the circumstances.

In our opinion, these financial statements present fairly the financial position of the company at December 31, 1968 and the results of its operations and the source and application of its funds for the year then ended, in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Montreal, Quebec. April 11, 1969 Peat, Marwick, Mitchell & Co. Chartered Accountants.

Balance Sheet as at December 31, 1968

Assets	1968	1967
Current assets:		
Cash and short-term deposits Marketable securities, at cost (market value \$2,937,175) Accounts receivable (including \$4,396 from affiliates) Supplies and prepaid expenses	\$ 2,607,246 2,925,875 572,909 90,774	3,090,090 1,797,650 419,252 137,140
Total current assets	6,196,804	5,444,132
Special refundable tax	75,199	88,262
Funds held by Trustee (note 1)	1,072,812	4,321,250
Plant and equipment, at cost (note 3)	59,691,070	55,001,713
Less accumulated depreciation	8,717,387	7,123,474
	50,973,683	47,878,239
	\$ 58,318,498	57,731,883
Liabilities		
Current liabilities:		
Accounts payable (including \$162,985 to affiliates)	\$ 558,347	916,251
Accrued liabilities	210,982	55,929
Dividends payable (including \$62,500 to affiliate)	187,500	262,500
Income taxes payable (note 2)	419,484	102,305
First Mortgage Bonds due within one year	0.000.445	4 040 000
(\$1,929,000 U.S.) (notes 1 and 4)	2,063,415	1,242,663
Total current liabilities	3,439,728	2,579,648
First Mortgage Bonds (notes 1 and 4):	0.5 0.5 4.5 5	0=000.400
5½ 0/0 Series A due June 30, 1986 (\$33,796,000 U.S.)	35,987,187	37,300,130
6 ¹ / ₄ 0/ ₀ Series B due June 30, 1989 (\$ 7,304,000 U.S.)	7,875,644	7,553,304
	43,862,831	44,853,434
Deferred taxes applicable to future years (note 2)	2,772,926	2,172,880
Shareholders'equity		
Capital stock (note 5):		
Authorized — 500,000 Class A shares of the par value of \$10 each		
-1,000,000 Class B shares of the par value of \$10 each		
Issued — 250,000 Class A shares fully paid	2,500,000	2,500,000
- 500,000 Class B shares fully paid	5,000,000	5,000,000
Retained earnings	743,013	625,921
	8,243,013	8,125,921
Commitments and contingent liabilities (note 3)	4. 4.	
	\$ 58,318,498	57,731,883
		*

The accompanying notes are an integral part of the above balance sheet and should be read in conjunction therewith.

Approved on behalf of the Board: W. J. BENNET, Director. M. F. NICHOLSON, Director.

Statement of Earnings and Retained Earnings for the Year Ended December 31, 1968

		1968	1967
Sales of power	\$	7,809,324	7,113,566
Cost of power		1,609,319	1,626,120
Interest (note 6)		2,213,730	2,168,668
Depreciation		1,593,913	1,513,676
		5,416,962	5,308,464
Earnings before the following items	< r >	2,392,362	1,805,102
Income from investments		306,196	287,435
		2,698,558	2,092,537
Taxes on income (note 2):		*****	
Current		701,577	269,877
Deferred		679,889	703,362
	SECTION TO SECULD	1,381,466	973,239
Net earnings for the year		1,317,092	1,119,298
Retained earnings at beginning of year		625,921	556,623
		1,943,013	1,675,921
Dividends		1,200,000	1,050,000
Retained earnings at end of year	\$	743,013	625,921

The accompanying notes are an integral part of the above statement of earnings and retained earnings and should be read in conjunction therewith.

Statement of Source and Application of Funds for the Year Ended December 31, 1968

		1968	1967	7
Source of funds:				
From current operations:				
Net earnings	\$	1,317,092	1,119,298	
Depreciation		1,593,913	1,513,676	
Deferred income taxes		600,046	703,362	
Disposal of plant and equipment			9,816	
	***************************************	3,511,051	3,346,152	
Special refundable tax — net		13,063	(28,179))
Funds from Series B Bonds drawn from Trustee		4,321,250	3,232,054	
		7,845,364	6,550,027	
Application of funds:				
Plant and equipment — net		4,689,357	5,418,285	
Reduction of long-term debt		2,063,415	1,242,663	
Dividends		1,200,000	1,050,000	
		7,952,772	7,710,948	
Decrease in working capital	\$	107,408	1,160,921	
	W. 11		<u> </u>	

The accompanying notes are an integral part of the above statement of source and application of funds and should be read in conjunction therewith.

Notes to the Financial Statements as at December 31, 1968

(1) First Mortgage Bonds:

The following amounts of $5^{1/2}$ $^{0/0}$ First Mortgage Bonds Series A due June 30, 1986 and $6^{1/2}$ $^{0/0}$ First Mortgage Bonds Series B due June 30, 1989, have been authorized, issued and retired by Twin Falls Power Corporation Limited ("Twin Falls"), pursuant to the terms of the Deed of Trust and Mortgage, as amended ("Trust Deed").

	Series A	Series B
	(U.S. \$)	(U.S. \$)
Authorized	42,500,000	10,000,000
Issued	39,500,000	8,000,000
Retired	4,471,000	
Outstanding December 31, 1968	35,029,000	8,000,000
Payable within one year	1,233,000	696,000

Series B Bonds in a principal amount of U.S. \$600,000 will be redeemed prior to March 31, 1969 to reduce the Series B Bonds outstanding to the agreed proportion of the expenditures incurred to construct the additional generating unit and related facilities. Sufficient funds are held by the Trustee to make this redemption which is included above in the amount payable within one year.

Series A Bonds are repayable in equal semi-annual instalments of principal and interest on June 30 and December 31. Series B Bonds will be repayable in equal semi-annual instalments of principal and interest on the same dates commencing December, 1969. The Series A Bonds and Series B Bonds are secured by a first fixed and specific mortgage, pledge and charge on plant and equipment and long-term power and other contracts and a first floating charge on all other assets of Twin Falls. Certain restrictions are placed on the payment of dividends other than stock dividends.

(2) Income Taxes:

Taxes on income have been provided on the basis of claiming maximum capital cost allowances permitted by the Income Tax Act. These allowances exceed the depreciation recorded in the accounts. The resulting reductions in current income taxes have been recorded as deferred taxes applicable to future years.

(3) Commitments and Contingent Liabilities:

- (i) Twin Falls has a Sublease from Churchill Falls (Labrador) Corporation Limited giving Twin Falls the right to develop the hydroelectric power potential of the Unknown River, a Tributary of the Churchill River, at the site of the Twin Falls project. The Sublease expires December 31, 1989 but may be renewed for a term of 25 years, if Twin Falls so requests.
- (ii) Rentals payable annually to Churchill Falls (Labrador) Corporation Limited amount to \$305,000 and \$1.40 per installed horsepower. In addition, Twin Falls pays an annual royalty of 50 cents per horsepower year generated (as defined). In the event that Churchill Falls diverts water from Twin Falls it must deliver equivalent hydro electric power to Twin Falls as provided in the Sublease. The rentals and royalty will be payable at the same rates, the royalty being calculated as though the power so delivered had been generated in the Twin Falls plant.

Notes (continued)

(iii) The installed horsepower was increased from 240,000 horsepower to 300,000 horsepower with effect from October 1, 1968. The final cost of the additional capacity and related facilities amounts to \$10,620,467 inclusive of \$218,799 for expenditures made subsequent to December 31, 1968.

(4) Foreign Currency Balances:

The First Mortgage Bonds Series A and B are carried in the balance sheet at the proceeds in Canadian dollars realized at the time such bonds were issued and U.S. funds required to service this debt are made available without loss or gain on exchange to Twin Falls by its customers under its long-term power contracts.

(5) Capital Stock:

The issued share capital of Twin Falls consists of 250,000 Class A shares each of \$10 par value owned by Churchill Falls (Labrador) Corporation Limited and 500,000 Class B shares each of \$10 par value, owned by the present long-term customers of Twin Falls. The Class A shares are entitled to four votes per share and the Class B shares are entitled to one vote per share but rank pari passu in all other respects.

(6) Interest:

Interest charges for the year have been allocated as follows:

	Total	Plant and Equipment	Interest expense
First Mortgage Bonds	\$ 2,579,730	353,691	2,226,039
Less interest earned on funds held by Trustee for Series B			
Bonds	253,961	202,553	51,408
	2,325,769	151,138	2,174,631
Bank loan	107,103	68,004	39,099
	\$ 2,432,872	219,142	2,213,730

Auditors' Report to the Shareholders

We have examined the balance sheet of Twin Falls Power Corporation Limited as at December 31, 1968 and the statements of earnings and retained earnings and source and application of funds for the year then ended. Our examination included a general review of the accounting procedures and such tests of accounting records and other supporting evidence as we considered necessary in the circumstances.

In our opinion, these financial statements present fairly the financial position of the company at December 31, 1968 and the results of its operations and the source and application of its funds for the year then ended, in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Montreal, Quebec March 19, 1969 Peat, Marwick, Mitchell & Co. Chartered Accountants.

(Continued from page 6)

In addition to this work, detailed studies were carried out on transmission and switchyard facilities in preparation for the major procurement program scheduled in these areas in 1969.

Another vital engineering activity was the model testing of the turbines and generators. Performance tests have been satisfactory and plant manufacture has commenced under the \$50 million contract for this machinery.

General

A computer was acquired during the year in order to process adequately the ever-increasing amount of data required to control a project of this magnitude and complexity. This will be used for a variety of tasks including a Management Information System and for the control and expediting to the site of supplies in the transport system.

The build-up of the Company's staff continued, in line with the stage of development of the Project. Several appointments were made, of which the most significant was that of Mr. H. L. Snyder as Project Manager. He had previously served as Construction Manager for CFLCo, and has been associated with the Project since 1963.

During the course of the year a film on the Project entitled "Power in Perpetuity", was screened to a wide variety of audiences in Canada and the United States and elsewhere overseas.



Town centre and housing under construction for the permanent community.

It has been widely acclaimed as an excellent production. The Churchill Falls film is being updated with more recent construction sequences, and a current version will be ready for release about mid-year.

The Churchill Falls News, designed primarily for the on-site workers, has also won the interest of people in many parts of the world, who have found it a compact weekly summary of significant Project developments. Early in 1969, a French language edition of the Churchill Falls News was introduced.

1969 Program

The direct construction cost forecast for 1969 is \$126 million. This is nearly double the 1968 expenditure and indicates the acceleration of the Project during 1969. The annual budget for the entire operation of

the Company in 1969 is set at approximately \$150 million.

The 1969 field work will involve more than 60 separate contracts, and many more sub-contracts, and will cover activities ranging from work on the powerhouse complex to the paving of the new airstrip which was opened in November. It is forecast that the peak field force will rise to 4,500 during the course of 1969. Approximately 2,500 men will work from the Main Camp at the power site, and the other 2,000 will be at out-camps scattered across the Project area, in some cases more than 100 miles from the Main Camp.

(Continued on page 16)

(Continued from page 15)

The completion and occupancy of the first phase of the permanent houses and apartments at Churchill Falls will occur in 1969; also the completion of the Town Centre for the permanent community, including the new school, stores, indoor sports, and other public services and facilities.

During 1969, it is planned to complete excavation of the powerhouse, surge chamber and transformer gallery, and work will commence on raising and concreting the penstocks. The bus tunnels between the powerhouse and the transformer gallery are scheduled for completion, and a start will be made on raising the cable shafts to surface. In conjunction with the penstock work, excavation for the intake structure will proceed. and concrete work will start in this area. The top portions of both tailrace tunnels are scheduled for completion, and excavation or benching of the east tunnel to full size will be started.

Work is planned to start in 1969 on the Whitefish Falls control structure between the intake and the Lobstick main reservoir control, and on the Jacopie spillway, which structure will cut off the Churchill River flow above the Falls and divert it along the new channel to the intake. Work will continue on the construction of dykes in the forebay and in the Jacopie and Sandgirt-Lobstick areas. An award is scheduled for commencement of dyke work in the Orma Lake area.

Construction of the Sail Lake road during 1969 will complete a network of over 300 miles of roads required to give access to major Project work locations.

Clearing of the right-of-way for the transmission circuits, which was started in 1968, should be completed in 1969, with work starting on tower footings and anchors for the first of the three transmission lines. At the

power site itself, on the surface above the underground complex, grading is planned during the current year for the station switchyard over an area of approximately 110 acres.

During 1968, more than 60,000 tons of equipment and supplies were transported to work sites, and it is expected during 1969 the tonnage moved to site will be over 100,000 tons. In preparation for increasing traffic, and to handle the heavy equipment being ordered for the power installations, terminal facilities at Sept-Iles and at Esker will be further upgraded this year, including the installation of cranes capable of 250-ton lifts.

In 1969, procurement of heavy electrical switchgear and transformers for the powerhouse and for the 735 Kv transmission lines will commence.

Twin Falls Power Corporation

During 1968, the operation of Twin Falls continued to be satisfactory and service to mining customers and to the Churchill Falls Project was continuous and reliable. No interruptions were experienced despite the major construction work underway during the fifth unit installation.

Under the management of the Churchill Falls Project Group, the installation of the fifth 60,000 horsepower unit was completed in October, several weeks ahead of schedule and within estimates. It has been in service since that time without any difficulties.

This was a satisfactory performance by those concerned.

* * *

The past year has been a watershed in the affairs of your Company both in

terms of financing arrangements for the large sums of money involved, and in the physical state of the Project, which is now well advanced in actual construction in the field and in respect to manufacturing off-site.

We enter 1969 with our time schedules and cost structure under control, and with the Company's establishment up to strength and ready for the tasks which lie ahead of us, in order to bring this undertaking to a successful conclusion.

Respectfully submitted on behalf of the Directors

D. GORDON,

D. J. McPARLAND, PRESIDENT Montreal, April 11, 1969

- 1. Drilling at the powerhouse intake.
- **2.** Excavating tunnel to the surge chamber.
- **3.** Testing model of 648,000 horsepower turbine.
- **4.** Pouring concrete at the Lobstick control structure.
- 5. North side of lower Churchill river; half way up, entrance to the mile-long access tunnel to the powerhouse; at river's edge (bottom left), portals for the two tailrace tunnels.









Churchill Falls Development

Major Contracts for Construction and Field Support Services

October 13, 1966, to March 1, 1969:

Managers of Engineering and Construction: Acres Canadian Bechtel of Churchill Falls

1 Power Facilities

Turbines, generators and auxiliary equipment:

The Churchill Falls (Machinery)
Consortium, comprising Canadian
General Electric Company Limited,
Montreal, Quebec; Dominion Engineering Works Limited, Lachine, Quebec;
and Marine Industries Limited, Sorel,
Quebec.

Service road to access and tailrace tunnel portals; initial portal preparation; access tunnel; top heading of west tailrace tunnel; vertical access shaft and lining:

Walsh Canadian Construction Company Limited.

East tailrace tunnel portal preparation:
Janin Construction Ltd.

East tailrace tunnel and completion of west tailrace tunnel:

Spino Construction Co. Ltd.

Main civil work underground powerhouse complex; intake structure and concreting of penstocks:

Churchill Constructors (Joint Venture), comprising Atlas Construction Co. Limited, Janin Construction Ltd., McNamara Corporation Limited, C. A. Pitts Construction (Ontario) Limited, Dravo of Canada Limited, and Northwin Constructors Ltd.

Powerhouse access elevator:
Otis Elevator Company Limited.

Powerhouse crane and auxiliary hoists:
Provincial Crane Division of Dominion
Bridge Company Limited.

2 Main Camp

Initial camp installations; Group II buildings; additional camp installations:

Dufresne Mannix Joint Venture, comprising Dufresne Engineering Co. Ltd. and Mannix Company Limited.

Design and construction of single status accommodations:
Atco Industries Ltd.

Roads, utilities and site grading: Miron Company Limited.

Electrical power distribution system: Northeastern Development Limited.

Recreation building:

Joint venture of Newfoundland Engineering & Construction Company Limited and Secant Construction Company.

Completion of mess hall: Terra Nova Construction Company Limited. Group III buildings:

Newfoundland Engineering & Construction Company Limited.

Additional camp installations: Francon Limited.

(3) Permanent Community

Town centre and housing: Secant Construction Company.

Hospital:

Janin Construction Ltd.

Roads, utilities and grading: Desourdy Construction Limitée.

Electrical power distribution: Checo Newfoundland Limited.

(4) Churchill Falls Airport

Paved airstrip:

H. J. O'Connell Limited.

Terminal building:

St. Lawrence Construction Limited.

5 East Forebay and Jacopie-Lookout dykes:

Foundation-Lundrigans, a joint venture comprising The Foundation Company of Canada and Lundrigans Limited.

6 Access road to Main Camp and power site:

Dufresne Mannix Joint Venture.

- 7 Bridge Camp expansion: Francon Limited.
- 8 Jacopie and Whitefish Falls roads: Francon Limited.
- 9 Power line from Twin Falls and terminal installations:

Northeastern Development Limited.

© Clearing of right-of-way for 735,000-volt lines:

Réal Ste-Marie Ltd.

- Road to Mile 35 Camp and camp: Francon Limited.
- Road to Seahorse Camp and camp:

St. Lawrence Construction Limited.

13 Power lines to major work locations:

Checo Newfoundland Limited.

- Main road improvements:
 Richard & B. A. Ryan (1958) Limited.
- Esker expansion:
 St. Lawrence Construction Limited.
- 16 Road to Lobstick control structure:

Francon (1966) Limited.

Sandgirt-Lobstick dykes: Miron Company Limited.

(18) Lobstick Control Structure

Excavation:

Dufresne Mannix Joint Venture.

Construction:

Simard Beaudry/Dumez, a joint venture of Simard Beaudry Inc. and Dumez (Canada) Ltée.

(19) North Rapids Camp: Francon (1966) Limited and Simard Beaudry/Dumez.

Road to east dykes:
Dufresne Mannix Joint Venture.

21 East Dykes Camp: Dufresne Mannix Joint Venture.

Road to Sail Lake and camp; Orma Lake Camp:

H. J. O'Connell Limited.

Orma-Sail dykes:
Mannix — Brown & Root — Curran and
Briggs, a joint venture of Mannix
Company Limited, Brown & Root
Limited, and Curran and Briggs Limited.

24 Road to Orma Lake: Dufresne Mannix Joint Venture.

25 Intake channel and intake structure excavation; intake area dykes: Northern Construction Company & J. W. Stewart Limited.

(26) Field Support Services

Camp accommodations:

Atco (Quebec) Ltée and La Fonderie de L'Islet.

Catering:

Bona Vista Food Services Ltd.

Main Camp maintenance: Bédard Girard Newfoundland Limited.

Telephone and radio communications: Bell Canada.

Medical services:

International Grenfell Association.

Marine transport and stevedoring: Maritime Agency Inc.

Freight transport, Esker to work sites: Northern Express Limited.

Fuel:

Imperial Oil Limited.

Cement handling:

Ironland Concrete Supplies Ltd.

Aggregate and concrete production, Lobstick:

Desourdy Construction Limitée.

Aggregate production, Main Camp: Richard & B. A. Ryan (1958) Limited.

Concrete production, Main Camp: Desourdy Construction Limitée.

Cement Supply:

North Star Cement and Ciment Lafarge.



Churchill Falls Development Basic Facts

Geography

700 mi. NE Montreal, 650 mi. NW St. John's, 1,000 mi. from Toronto and New York.

16 in. of rain plus 154 in. of snow annually; extreme high 87 $^{\circ}$ F, extreme low $-55 ^{\circ}$ F

Churchill Falls is 245 ft. high (Niagara 184 ft.); rapids above Falls are 215 ft., rapids below 580 ft. for total drop of 1,040 ft. in 20 mi. of river.

Dates

Letter of Intent CFLCo/Hydro-Quebec October 13, 1966; start of rock work fall 1967; commercial delivery of first power May 1, 1972; completion of project not later than 1976.

Water and Reservoirs

Upper Churchill catchment 21,700 sq. mi. increased to 26,744 sq. mi. $(24^{9}/_{0} \text{ of Labrador})$ by diversions.

Reservoirs 2,567 sq. mi. (more than one-third the area of Lake Ontario) with 1,100 billion cu. ft. of usable water contained by 40 mi. of dykes and regulated by six control structures, including two spillways. Longest dyke will be more than three and a half miles.

Flow of Churchill river approx. 49,000 cu. ft. per second.

Major Excavations

Powerhouse: 984 ft. underground, 972 ft. long, 81 ft. wide, 154 ft. high (max.).

Surge Chamber: 763 ft. long, 148 ft. high, 40 to 64 ft. wide. Transformer Gallery: 832 ft. long, 50 ft. wide, 39 ft. high. 11 inclined penstocks, 1,200 ft. long, 20 ft. diameter (lined).

2 tailrace tunnels 45 ft. wide, 60 ft. high, 5,550 ft. long.

6 cable shafts, two other vertical shafts, one access tunnel 33 ft. wide, 28 ft. high, 5,200 ft. long.

Power Generation

Underground powerhouse almost 1,000 ft. deep housing: 11 turbines at 648,000 hp each and 11 generators at 475,000 kw each.

Total rated generating capacity will be 5,225,000 kw (more than 7,000,000 hp) with an annual production of about 34.5 billion kw-hours.

Largest single hydro-electric development undertaken in North America and largest underground powerhouse in world.

Generator output at 15,000 volts a.c., raised to 230,000 volts underground, then to 735,000 volts on surface; three circuits at 735,000 volts, two at 230,000 volts.

Field Force

June 1968, 1,300; fall 1968, 3,000; peaks in 1969 and in 1970, 4,500 to 5,000 workers.

Services on Site

Churchill Falls is served by two commercial airlines (EPA and Quebecair), Bell Canada, CN Telegraphs, Post Office, Bank of Montreal, and CBC radio and television.

There is a school to Grade 9, health services, recreation facilities, RCMP, security and fire force.

Permanent Community

Churchill Falls after completion of power project will have a permanent population in excess of 1,000.

Being completed in 1969 are single and multiple dwellings, a permanent hospital, and a town centre grouping under one roof most public services and facilities, including school, stores, indoor recreation, auditorium/theatre, 21-room hotel.



